

Patients' reports of health care practitioner interventions that are related to communication during mechanical ventilation

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BACKGROUND: The literature supports nursing interventions to maximize communication in mechanically ventilated patients, yet limited research exists on patients' perceptions of the helpfulness of health care practitioner interventions to enhance communication. In addition, the level of frustration experienced by these patients has not been reported. Thus, further research is necessary to examine patients' perspectives of the helpfulness of health care practitioner interventions that enhance communication of the mechanically ventilated patient.

OBJECTIVES: This study describes the level of frustration experienced by mechanically ventilated patients and ascertains the helpfulness of methods used by health care practitioners to meet the communication needs of the mechanically ventilated patient.

METHODS: A total of 29 critically ill patients, extubated within the last 72 hours, were included in this descriptive study using qualitative and quantitative methods. Subjects participated in an average 30-minute audiotaped interview session consisting of questions pertinent to their perceived level of frustration in communicating and the interventions practitioners used to meet their communication needs. Transcripts were analyzed by question and for overall themes.

RESULTS: It was found that 62% of patients ($n = 18$) reported a high level of frustration in communicating their needs while being mechanically ventilated. There was no significant difference between the duration of intubation and the level of frustration (Spearman $r = .109$, $P = .573$) or between the diagnosis and the level of frustration ($P = .932$). Patients who received anxiolytics ($n = 23$, 79% of the sample) had a lower level of frustration (mean 3.26) than those who did not receive anxiolytics ($n = 6$, 21% of the sample, mean 4.33). This difference trended toward significance ($P = .084$). Patients cited health care practitioner behaviors, characteristics, and attributes that both facilitated communication (kind, informative, and physically present at the bedside) and impeded their ability to communicate (mechanical, inattentive, and "absent" from the bedside). Patients reported problems and stresses associated with communication difficulties that can be alleviated by the health care practitioner.

CONCLUSIONS: Mechanically ventilated patients experience a high level of frustration when communicating their needs, and health care providers have a significant impact on the mechanically ventilated patient's experience. Further research is needed to explore and measure methods of facilitating communication that increase patient satisfaction, reduce patient anxiety, and obtain optimal pain management. (Heart Lung® 2004;33:308–21.)

INTRODUCTION

Mechanically ventilated patients experience many barriers to communicating their needs.¹ Pa-

tients have reported that their inability to communicate results in unrecognized pain, feelings of loss of control and depersonalization, anxiety, fear, distress, and frustration.^{2–8} According to Levine et al,⁹

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The study was funded by a Sigma Theta Tau, Gamma Tau Chapter Research Grant.

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0147-9563/\$ – see front matter
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doi:10.1016/j.hrtlng.2004.02.002

the lack of ability to communicate with care providers and family during periods of mechanical ventilation results in high-risk situations and increases patient anxiety and frustration because life-threatening needs may not be met. Patients receiving mechanical ventilation have reported communication difficulties as their number 1 problem while being intubated.^{5,8,10}

Health care practitioner interventions often include interpreting patients' nonverbal forms of communication such as mouthing, gesticulating, nodding, and writing. Such nonverbal methods require excess energy and are fatiguing and emotionally draining for these patients. Previous literature supports health care practitioner interventions in facilitating communication in mechanically ventilated patients. However, limited research exists on the patient's perception of the helpfulness of these interventions.^{2,11,12} Furthermore, previous research studies have not yet reported the actual level of frustration experienced by mechanically ventilated patients. Therefore, research is needed to investigate these areas.

This study describes the level of frustration experienced by mechanically ventilated patients and ascertains the helpfulness of methods used by health care practitioners to meet the communication needs of the mechanically ventilated patient. This study will add to the body of knowledge regarding communication in mechanically ventilated patients by reporting the actual level of frustration these patients experience and exploring their perception of the methods used by the health care practitioner during communication.

REVIEW OF LITERATURE

In the last 20 years, research studies related to mechanical ventilation have focused on the experiences of the patient and his or her communication with the health care practitioner. First, the experiences of patients who required mechanical ventilation were explored in 3 qualitative studies (Table 1). Jablonski¹³ interviewed 12 participants who were intubated and mechanically ventilated 2 to 108 months after their intensive care unit (ICU) experience. All were initially orally or nasally intubated, and 4 required a tracheostomy at a later time. From the interviews, she identified patients experiencing frustration, anger, fear, and anxiety in their failure to communicate by mouthing words, using gestures, or writing. Patients reported that their attempts to communicate were interpreted by health care providers as apprehension and thus frequently resulted

in the administration of sedatives or morphine. The use of medication as a "restraint" often perpetuated the problem it was trying to solve. The author concluded that health care providers, especially nurses, are the communication gatekeepers and ultimately control the type of experience that mechanically ventilated patients have.

Bergbom-Engberg and Haljamae¹⁴ retrospectively interviewed 158 patients on their recall of experiences while being mechanically ventilated 2 to 48 months after their ICU experience. The telephone interviewers inquired about the influence of medical and nursing care factors on the patient's experience of discomfort and feelings of security or insecurity. Approximately 50% of the patients were able to remember the experience of being ventilated, and most recalled the situation as discomforting and stressful. Approximately half of the subjects reported experiencing feelings of anxiety/fear, agony/panic, and insecurity, and found it distressing not to be able to communicate properly with the nurses and their relatives.

Similarly, Johnson and Sexton⁵ interviewed 14 patients and identified 19 factors that caused distress for these patients. In this qualitative study, the inability to speak was identified by all participants as causing distress to some degree, from mild to extreme. In addition, other factors causing distress included pain/discomfort from the endotracheal tube, suctioning, inability to determine time, and noise. These distressing factors can be alleviated by health care professionals.

Three other studies closely examined communication patterns and behaviors between patients and their health care providers (Table 2). Ashworth¹⁵ investigated problems in communication between nursing staff and patients with orotracheal, nasotracheal, or tracheostomy tubes in 5 ICUs. By observing nurse-patient communication and interviewing nurses and patients, she found that communication was not only short in duration (<1 minute) but also limited to task-related activities. Ashworth described the nurse-patient communication as depersonalizing, failing to acknowledge each patient's individuality. Most of the time the nurses' communication failed to address the patients' specific physical and emotional needs and was something that "just happened."¹⁵

Leathart¹⁶ further explored nurse-patient communication patterns through observations and interviews. Similar to Ashworth's study,¹⁵ Leathart's study found communication between nurses and patients to be extremely brief (<30 seconds in duration, and at most 2 minutes) and mostly informa-

Table I

Exploring patients' experiences during mechanical ventilation

Author	Design and sample
Bergbom-Engberg and Haljamae ¹⁴	<i>Design:</i> Descriptive <i>Sample:</i> N = 158; 158 recalled MV of 304 interviewed. <i>Age (yr):</i> 53.3 <i>Male:</i> 64%; <i>Female:</i> 36% <i>Diagnoses:</i> medical, surgical, and trauma
Johnson and Sexton ⁵	<i>Design:</i> Descriptive <i>Sample:</i> N = 14; sample not described further.
Jablonski ¹³	<i>Design:</i> Descriptive <i>Sample:</i> N = 12 <i>Age (yr):</i> 51.7 <i>Male:</i> 42%; <i>Female:</i> 58% <i>Diagnoses:</i> RD, cardiac arrest, GBS, and ruptured CA

MV, Mechanical ventilation; ICU, intensive care unit; RD, respiratory distress; GBS, Guillain-Barre syndrome; CA, cerebral aneurysm.

tional, as well as consisting of asking questions and giving demands. Leathart described the communication patterns demonstrated by ICU nurses to be a learned behavior developed through protective mechanisms that insulate the nurse from anxiety and stress. Such defensive mechanisms are non-therapeutic to the patient. These defensive mechanisms are often demonstrated through depersonalization of patients and ritualistic care, which counters the ideology of individualized, compassionate care.

Stovsky et al¹⁰ compared 2 methods of communication used in 40 mechanically ventilated patients after cardiac surgery. The experimental group (n = 20) was introduced to a communication board before surgery and used it during the postoperative period while being mechanically ventilated. The communication board used icons and pictures to represent basic needs (pain, fear, hot/cold, thirst, and bedpan). In contrast, the control group (n = 20) relied on standard care and the experience of the nurse. Patients in the

experimental group demonstrated significantly increased satisfaction with communication using the board compared with the control group. A surprising finding was that the nurses who worked with the board did not express increased satisfaction. This was one of the few studies that evaluated an intervention to improve communication for mechanically ventilated patients. More research is needed to better guide the use of a communication board and to select its content.

In summary, the literature review of selected relevant studies on communication needs identified the various levels of emotion, such as frustration, that mechanically ventilated patients have experienced. However, the level of frustration was not measured in these studies. In addition, these studies described the great impact that nurses have on facilitating or impeding effective communication with patients. Yet, the usefulness of communication methods was not investigated. This study will add to the findings of previous studies regarding communication in the

Methods	Results and conclusion
With structured telephone interviews lasting 1-2 hrs, the participants' physical and emotional experiences relating to practical and technical aspects of MV and the inability to communicate were explored 2-48 mo after their ICU stay.	Results: (1) 47% felt anxiety and/or fear during MV; (2) these feelings related to the experience of agony/panic and insecurity; and (3) inability to communicate was dominating reason for evoking such feelings <i>Conclusion:</i> The relationship and communication process between the patient and nurse are the most important contributing factors for patients' feelings.
With semistructured interviews, 3 areas were explored that were thought to impose a degree of distress on mechanically ventilated patients. The areas were (1) the ventilator experience (2) the ICU environment, and (3) communication with care providers and interactions with family and friends.	<i>Results:</i> Nineteen factors contributed to distress during MV. Top 5 factors included (1) inability to speak, (2) pain and discomfort from a tracheal tube, (3) suctioning, (4) unable to determine time of day, and (5) noise. <i>Conclusion:</i> Most of the factors that caused distress were solvable by practitioners.
With semistructured audiotaped interviews, conducted 2-108 mo after ICU experience, participants described their thoughts, feelings, communication behavior, and interactions with hospital personnel.	<i>Results:</i> Fourteen of 15 thematic clusters described the experience of MV from intubation to extubation. One of 15 clusters offered patients' recommendations for improvement with MV. <i>Conclusion:</i> The behavior of health care practitioners either corrects or exacerbates problems associated with the inability to communicate.

mechanically ventilated patient by (1) describing the level of frustration patients experience when communicating while being mechanically ventilated and (2) ascertaining the helpfulness of methods used by health care practitioners to meet the communication needs of the mechanically ventilated patient.

METHOD

Design

The research method was an exploratory descriptive design with both qualitative and quantitative analysis. Data from this report are part of a larger descriptive study that explores the communication needs of 29 mechanically ventilated, critically ill patients. Subjects who signed the informed consent participated in an audiotaped interview session lasting 20 to 60 minutes. The principal investigator interviewed patients using a questionnaire consisting of 13 ques-

tions (Appendix A). The researchers developed the 13 questions based on their 25 years of collective clinical experience with mechanically ventilated patients. Questions were presented to a panel of 6 experts including ICU Clinical Nurse Specialists and 3 nurse researchers who reviewed them for content validity. Questions 9 and 10 were asked to uncover (1) the level of frustration that patients experienced when communicating during mechanical ventilation and (2) the patients' perceptions of the methods of interventions used by practitioners (registered nurses, physicians, and respiratory therapists) to facilitate communication. The results of these 2 questions are reported in this study. Because of the extensive amount of data obtained from other patient interview questions, findings regarding the patients' met and unmet communication needs and the helpfulness of a communication board (Vidatak EZ Board; Vidatak, Los Angeles, Calif) will be reported elsewhere.

Table II

Examining communication patterns and behaviors with mechanical ventilation

Author	Design and sample
Ashworth ¹⁵	<i>Design:</i> Descriptive <i>Sample:</i> N = 151 (39 patients, 112 nurses) in 5 ICUs
Leathart ¹⁴	<i>Design:</i> Exploratory <i>Sample:</i> N = 8; 8 intubated patients and their nurses were observed and interviewed; sample not described further.
Stovsky et al ¹⁰	<i>Design:</i> Quasi-experimental <i>Sample:</i> N = 40 (experimental group n = 20, control group n = 20); 40 patients who participated in preoperative teaching after cardiac surgery
ICU, Intensive care unit	

Sample and setting

After approval by the Human Subjects Protection Committee, a convenience sample of patients from the ICU of an urban university medical center who met the inclusion criteria were recruited for this study. Inclusion criteria were (1) age between 18 and 85 years, (2) English speaking, (3) orientation to person, place, time, and situation at time of the interview, (4) competency and ability to sign an informed consent, and (5) requirement of intubation and mechanical ventilation for at least 18 hours with extubation within the previous 72 hours. These time frames were chosen to provide a sufficient amount of time required to experience impaired verbal communication while awake and intubated, and to maximize the patients' recall of their experience being mechanically ventilated after extubation.^{17,18} Any subject who was non-English speak-

ing, had a tracheostomy, or was hemodynamically unstable at the time of the interview was excluded from the study.

Procedure

The principal investigator recruited participants by first reviewing documentation regarding inclusion criteria, such as the length of intubation and time of extubation. The investigator discussed potential subjects' physical and psychologic status with the nursing staff to determine any limitations in cognition or emotional state. After extubation, written informed consent was obtained.

The principal investigator conducted all of the interviews. The principal investigator prepared for the role of interviewer by audiotaping several role-playing interview sessions, with critiques by an experienced qualitative researcher.

Methods	Results and conclusion
With structured interviews, nurses and patients were asked questions relating to their communication methods, content, and interactions. Patients were interviewed 1-16 days after being transferred from the ICU. Interviews and observations were conducted to (1) identify the factors that influence nurse-patient communication, (2) determine whether nurses were able to identify their patients' needs and problems, and (3) explore the attitudes of the nurses. An experimental group and control group compared picture board and standard care methods to determine effectiveness in communication.	<i>Results:</i> Most (71%) nurse-patient communication was short (<1 min) and task-related, and occurred at a frequency dependent on the number of patient communications. <i>Conclusion:</i> The communication was found to be depersonalizing and most often "just happened." <i>Results:</i> Communication between nurses and patients was extremely brief (most <30 sec, no >2 min). Nurses identified difficulty in lip reading, frustration at not understanding nonvocal messages, and lack of training. <i>Conclusion:</i> Nontherapeutic behavior by nurses is socialized and developed through defensive mechanisms, protecting the ICU nurse from anxiety and stress, yet denying individualized care to patients. <i>Results:</i> Patients who used the communication board had significantly higher ($P = .05$) satisfaction with communication during their intubated period than did the control group. Nurses expressed no change in satisfaction with communication between both groups. <i>Conclusion:</i> A picture board improved nurse-patient communication among mechanically ventilated patients.

Demographic data were obtained from the medical record and patient recollection. Interviews took place in the unit in a private critical care or intermediate care patient room with a curtain drawn or door closed. This ensured privacy and an environment conducive to discussion (ie, limiting extraneous noises or distractions). Time for completion of the interview ranged from 20 to 60 minutes. Questions were asked in the same order. All responses were audiotaped and transcribed verbatim.

Instrumentation

Survey. The interview included 13 questions (Appendix A) that focused on 3 major areas of interest: (1) the patients' level of frustration with communication and their perception of communicating interventions used by health care practitioners; (2) the identification of the patients' perceived communi-

cation needs and their perceived barriers and facilitators to effective communication; and (3) a retrospective evaluation of the perceived helpfulness, use, and content of a communication board (Vidatak EZ Board). Ten interview questions were open-ended to permit in-depth qualitative analysis, and 3 questions used a 5-point Likert scale (1 = the least and 5 = the most) for quantitative analysis. The open-ended questions asked the patients to describe their experience of communication while being mechanically ventilated, which included their needs, facilitators, and barriers.

An open-ended question (question 9 of Appendix A) asked the patients to describe the method their health care providers used to help them communicate while being mechanically ventilated and unable to speak. The subsequent question (question 10 of Appendix A) used a Likert scale to determine the level of frustration the patients experienced in

Table III

Demographic characteristics of and medications used by the sample

Variable	Total (N = 29)	
	Mean	SD
Age (yrs)	55.5	17.27
Variable	Total (N = 29)	
	No.	%
Sex		
Male	19	65.5
Female	10	34.5
Diagnosis		
CM	5	17.2
CAD	4	13.7
Congenital	1	3.4
Valvular	8	27.6
Aneurysm	1	3.4
Organ transplant	3	10.3
Surgical resection	3	10.3
Pulmonary	2	6.9
Trauma	1	3.4
Renal	1	3.4
Ethnicity		
White	25	86.2
African American	1	3.4
Hispanic	2	6.9
Asian/Pacific Islander	1	3.4
Education		
High school	9	31.0
Undergraduate	7	24.1
Associate degree	6	20.0
Graduate	1	3.4
Doctorate	4	13.8
Unknown	2	6.9

Total percentages are less than 100 because of rounding.
 CM, Cardiomyopathy; CAD, coronary artery disease.

communicating while mechanically ventilated. Patients reported their level of frustration ranging from "not frustrating" to "extremely frustrating." The responses from these 2 questions are reported next. The responses from other questions will be reported elsewhere because of the extensive amount of data obtained from patient interviews.

ANALYSIS

Quantitative data were analyzed by using the Statistical Package for the Social Sciences 10.0

Table IV

Age and clinical characteristics of the sample

Variable	Total (N = 29)	
	No.	%
Anxiolytics		
Yes	23	79.3
No	6	20.7
Types		
Lorazepam	3	10.3
Midazolam	11	37.9
Multiple	9	31.0

(SPSS Inc, Chicago, Ill). Descriptive and frequency analyses were performed on all demographic data. All interviews were tape-recorded and then transcribed verbatim. Each transcription was examined separately by 2 researchers and individually analyzed for statements that related to the experience of being mechanically ventilated. Together, the 2 researchers shared their extracted statements and agreed on their meanings, or themes, for each statement. Each transcript was then transferred verbatim, according to the assigned theme, to a qualitative research computer program (Nudist; Qualitative Research & Solutions Pty. Ltd., Victoria, Australia). All qualitative data were analyzed using content analysis. An expert critical care nurse, experienced with mechanically ventilated patients, also conducted a confirmatory review of the data for identified themes.

Measures of central tendency were used to organize and present the demographic and clinical characteristics of the sample. Descriptive statistics were used to determine the frequencies of responses regarding the frustration levels in communication experienced by mechanically ventilated patients. A correlation coefficient was used to examine the relationship between the duration of ventilation versus frustration score. An independent *t* test was used to determine the differences between the use of anxiolytics and the level of frustration. Analysis of variance was used to examine the relationship between the diagnosis of a patient and the frustration score. A probability of .05 or less was used in all analyses as the criterion for significance.

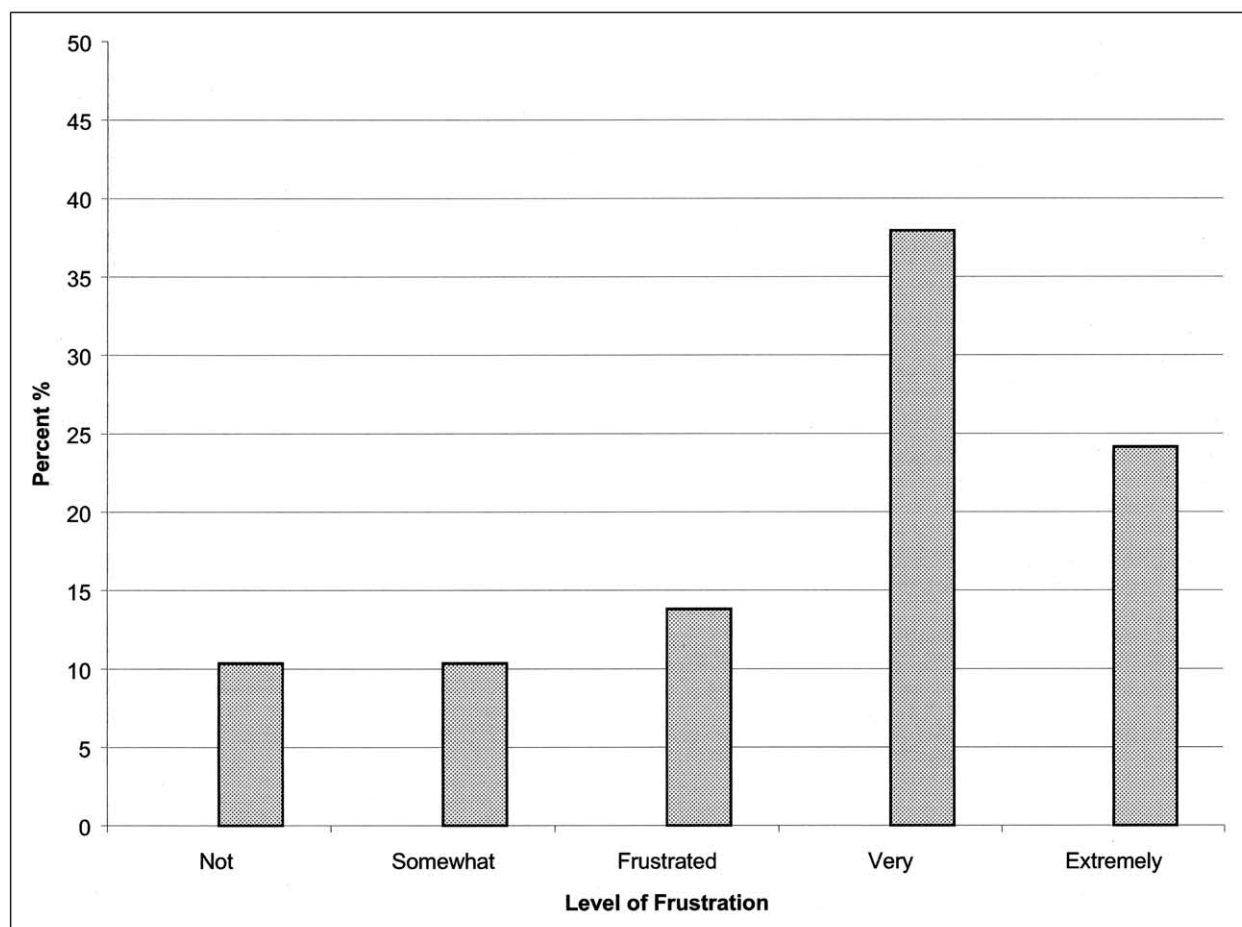


Fig 1 Level of frustration in communicating needs.

RESULTS

Description of subjects

Two of the 32 subjects were excluded from the study because of fatigue and inability to complete the interview. One additional subject was excluded because of a technical problem with recording the interview, and so verbatim audiotaped content of the interview was not possible. Data analysis was completed for 29 subjects. The majority of the participants were male (65.5%, $n = 19$). The mean age of the participants was 55 years (SD, 17.27 years). The most common primary diagnoses of the participants were valvular disorders (27.6%, $n = 8$) and cardiomyopathy (17.2%, $n = 5$). The demographic characteristics of the sample are summarized in Table 3.

Clinical characteristics of the sample included a mean mechanical ventilation time of 3.4 days (range 0.85-19.2 days). Eighty-six percent of the subjects ($n = 25$) were mechanically ventilated after elective

surgery. Fourteen percent of the sample ($n = 4$) required emergency intubation and ventilation for respiratory failure. Seventy-nine percent of the subjects ($n = 23$) received anxiolytic medications while being mechanically ventilated. Other information related to demographic and clinical characteristics of the sample is presented in Tables 3 and 4.

Patients' level of frustration

Sixty-two percent of the sample ($n = 18$) reported high levels of frustration associated with their inability to communicate effectively while being mechanically ventilated (24.1%, $n = 7$, extremely frustrating; 37.9%, $n = 11$, very frustrating). Twenty-four percent ($n = 7$) reported their experience as frustrating or somewhat frustrating (13.8%, $n = 4$, frustrating; 10.3%, $n = 3$, somewhat frustrating). Only 14% ($n = 4$) reported their experiences in communicating during mechanical ventilation as not frus-

trating (Fig 1). The relationship between patients' related factors (diagnosis, duration of ventilation, and receipt of anxiolytics) and the level of frustration were examined. There was no significant difference between the duration of intubation and the level of frustration (Spearman $r = .109$, $P = .573$) or between the diagnosis and the level of frustration ($P = .932$). Patients who received anxiolytics ($n = 23$, 79% of the sample) had a lower level of frustration (mean 3.26) than those who did not receive anxiolytics ($n = 6$, 21% of the sample, mean 4.33). This difference trended toward significance ($P = .084$).

Interventions provided by health care providers

On review of the audiotapes, common themes regarding the patients' perceptions of their health care practitioner interventions with communication included the following: (1) Health care providers need to intervene on behalf of the mechanically ventilated patient in ways to promote communication; (2) health care practitioners' characteristics and attributes have a direct impact on the patient's ability to communicate; and (3) health care practitioners' characteristics and attributes can result in the patient feeling misunderstood, devalued as a human being, and discouraged, and can actually impede patients' attempts to communicate. Patients' quotes were selected on the basis of on their ability to best represent and summarize the extracted themes and are presented next. Some quotes are also presented to contribute additional personal viewpoints that varied among patients' reports.

Health care providers can promote communication

In response to the question regarding interventions provided by health care practitioners, patients described activities performed by respiratory therapists, nurses, and doctors that enhanced their ability to communicate during mechanical ventilation. Of the 29 patients interviewed, 19 (66%) reported that the interventions used by health care practitioners actually helped them communicate their needs. Seven patients (24%) reported that the interventions used by health care practitioners did not help them communicate their needs. Three patients (10%) reported that health care practitioners did "nothing" to help them communicate.

The need for health care providers to intervene on behalf of the mechanically ventilated patient in ways that promote communication emerged as an overall theme. Practitioner interventions that were

helpful included asking questions, providing reassurance, having a kind or patient demeanor, reading what patients write as they are writing, and providing materials for writing.

Practitioners were described as asking the right questions that led patients through their communication process. Participants acknowledged that practitioners knew what questions to ask, asked a sufficient number of questions, asked permission from the subject before commencing a procedure, and asked questions that could be answered with a "yes" or "no." Patients described interventions provided by the practitioners that enhanced communication by stating the following: "They tried really hard to understand what I was saying . . . and guess. A lot of guessing. A lot of guessing. And they did fairly well." "Like he would say, 'Do you think you want to go through that procedure?'" "Asking questions. They . . . called for a yes or no response. So that I could shake my head yes or no."

Another patient recounted the experience of practitioners facilitating communication as follows: [A doctor] "aided me by reading the words as I wrote them instead of waiting for me to write the whole message. So that if I made a word she misunderstood, I knew immediately. Saved time, because if I wrote the whole message, then she might not have been able to decode the whole message if she misunderstood a word. They completed sentences, you know. They gave me options by saying, 'Do you mean this? Do you mean this?'"

Characteristics and attributes of the health care provider directly impact the patient's ability to communicate

Another emerging theme was the effect of the practitioner's characteristics and attributes on the patient's ability to communicate. Attributes that were considered helpful included being kind and patient, offering verbal reassurance and important information, and being present and available at the bedside. One patient described the relationships with their practitioners as follows: "I have to say I was very lucky. I had a great team of doctors. That really worked for me. They were just right. They came to see me anywhere from 3 to 5 times a day and I knew that they would even let me write to them."

Another patient stated, "There would always be someone there. You know, and I really needed some help, there was always someone there."

One patient described practitioner interventions that reduced anxiety as follows: ". . . by providing a

supportive, nurturing environment. . . . It really released a lot of the anxiety.”

Other patients stated the following: “The nurses were very kind.” “Some were patient and let me write it out.” “He reassured me that uh, they were going to treat me.”

One patient summarized the experience by stating “. . . basically they understood what I needed anyway and they were aware of the situation.”

Characteristics and attributes of the health care provider can discourage and impede the patient’s communication

Subjects also described the characteristics and attributes of practitioners that negatively impacted their communication. Most significantly, some health care providers were described as mechanical, nonpersonal, inconsistent, inattentive, and “absent.” These practitioner characteristics and attributes led to patients reporting feeling misunderstood, devalued as a human person, and discouraged, and then impeded patients’ attempts to communicate. One patient stated, “When I most needed to communicate I couldn’t speak, and I couldn’t really make myself understood. Nor did I feel like I was being given the opportunity to perform as an individual. I felt like I was being judged by a set of criteria for other patients. And, you know, that’s natural. I am not an ordinary patient. I’m sure no one’s an ordinary patient.”

A female patient recounted her experience as follows: “My thoughts weren’t their thoughts. It was maddening. You never got any help. They’d walk out and they played this little game where I put on the light and they’d shut it. I’d put on the light and they shut it. Then finally I said I’m not going to play that game and I’ll just wait till morning until the new shift comes on and that was really stinko because it was like falling asleep and waking up and falling asleep and waking up.”

One patient recounted his negative experience and feelings of loss of control: “The nurses. Some of them were mean. They don’t want to do whatever you want them to do. They always want to do what they want to do.” Other patients stated the following: “The people were mechanical. There was no professionalism.” “They don’t even consider giving you a piece of something as simple as a piece of paper.” “And there was one doctor who had a hold of my paper and lied to me and said he didn’t have any paper. But I happened to hear him say what was on the paper. . . . So I know he had my paper. But he

refused to be honest and tell me he had it. So I was upset with that.”

Some patients described difficulties in obtaining interventions for pain relief from their health care provider: “I don’t know why she couldn’t look back at the chart and see where I could have the ice chips. Well, then that seemed one of the most upsetting things I knew, because the ice chips relieved the pain I was having in my throat.” “I kept trying to tell them I had pain in the back and uh they didn’t understand what I was saying. Finally I just came to the point where I stopped.”

DISCUSSION

Mechanically ventilated patients are unable to vocalize feelings, verify perceptions, and cope with fears, anxiety, and stress through verbal communication.¹¹ Heath⁷ reported that mechanically ventilated patients are desperate in making themselves understood and that nurses dismiss patients’ communication efforts. Previous studies have suggested interventions that alleviate patients’ legitimate fears and preserve their identity and dignity. These interventions included talking, explaining, reassuring, and providing communication devices at the patient’s bedside.^{19,20} Although intuitively one would think that these interventions might be helpful, they have not been validated or tested by research to date.

Our findings indicate that mechanically ventilated patients experience a high level of frustration in communicating their needs and that the health care provider can significantly impact the experience of mechanically ventilated patients. This study differs from previously published studies that explored patients’ experiences during mechanical ventilation. The patients interviewed in this study were asked to quantify their level of frustration and describe interventions used by practitioners that facilitated or impeded their ability to communicate. To date there have been a limited number of studies that describe patients’ perceptions of interventions, characteristics, and attributes of practitioners that facilitate or impede communication.

This study adds new information about the relationship of communication patterns between mechanically ventilated patients and health care providers. Our study presented various behaviors and characteristics of health care professionals that impact effective communication of mechanically ventilated patients. Behaviors and characteristics such as being kind, informative, and physically present at the bedside enhance communication. On the con-

trary, behaviors and characteristics such as being mechanical, inattentive, and "absent" from the bedside impede communication.

These behaviors and characteristics were not documented in the previous studies discussed. Studies by Jablonski,¹³ Bergbom-Engberg and Haljamae,¹⁴ and Johnson and Sexton⁵ focused on the patients' feelings and experiences (eg, anger, discomfort, and anxiety) when they were not able to communicate effectively. Two studies by Ashworth¹⁵ and Leathart¹⁶ described nurse-to-patient communication patterns. The communication was depicted as brief, informational, and demanding. Thus, they concluded that communication was depersonalizing and nontherapeutic. These 2 studies did not describe patients' perceptions of the characteristics of health care providers in enhancing or impeding communication. Thus, our study findings add to the body of knowledge of patients' communication needs in that it explored the patient's perception of those characteristics and behaviors that facilitate or impede communication. The findings also further support previous studies in regard to the power of the nurse-patient relationship, because the problems associated with communication difficulties with these patients can be alleviated by the health care practitioner.²

The findings from this study recommend 5 interventions based on data obtained from patient interviews. These interventions may help in facilitating the communication process and experience of the mechanically ventilated patient. First, health care professionals need to be educated regarding the level of frustration that mechanically ventilated patients experience when communicating. Second, health care providers can alter the experience of patients being mechanically ventilated. They should routinely ask patients questions about their feelings and state of mind. Health care providers should also seek permission for nursing care and medical procedures before commencing them and then evaluate patients' understanding of any information that is conveyed to them. Asking simple and short "yes or no" questions are recommended because they require the least amount of energy to answer. Third, health care practitioners must be attentive to mechanically ventilated patients and inform them of their surroundings and plan of care, and establish a return time when leaving the bedside. This may help patients from feeling trapped, secluded, and alone. Fourth, health care providers should approach patients with a kind and patient demeanor, investigate their communication needs, and provide them with what they need. Fifth, health care practitioners

should provide writing materials and read the patients' words as they write. This allows patients to verify whether the reader understands them correctly. Patients' written words represent silent thoughts during a critical period of life and are invaluable to those who own them. It is therefore important to keep used writing papers unless the patient gives permission to discard them.

CONCLUSION

The results of this study permit health care practitioners to see the communication needs of mechanically ventilated patients through the eyes of the patient. Patients report being frustrated in their attempts to make their needs known and further acknowledge the role of the critical care nurse in bridging the communication gap. This information offers insight into the actual level of frustration patients experience when attempting to communicate while being mechanically ventilated. Patients also described effective interventions, characteristics, and attributes used by health care practitioners.

Future research is needed to evaluate interventions aimed at facilitating communication with respect to outcomes such as patient satisfaction, patient anxiety, optimal pain control, and comfort. Furthermore, other measurable areas of investigation relating to the effect of improving communication for mechanically ventilated patients include (1) decreasing hours of intubation, (2) facilitating a patient's ability to be weaned from the ventilator, and (3) reducing length of stay in the hospital in relation to decreasing complications from prolonged mechanical ventilation.²¹

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Appendix A

Patient Survey

The following is a survey. All answers will be held in strict confidentiality. Your name will not be associated with your answers in any respect.

Please answer the following questions to reflect your experience while you were ventilated. The questions pertain to your personal needs and how your needs were met while you were intubated. They also reflect your communication methods and how you managed to get your needs met.

There are 13 questions. It will take you approximately 30 minutes to complete the survey.

The following items are required before completing the survey.

Thank you for your time and contribution to this study.

DATE: _____ PATIENT ID #: _____
 AGE: _____ OCCUPATION: _____
 GENDER: M F LEVEL OF EDUCATION: _____
 ANXIOLYTIC MEDICATIONS GIVEN WHILE PATIENT INTUBATED: _____

ADMISSION DATE: _____ PRIMARY DIAGNOSIS: _____
 SECONDARY DIAGNOSIS: _____

DATE/TIME PATIENT INTUBATED: _____
 (Must have been intubated a **minimum** of 18 hours)

DATE/TIME PATIENT EXTUBATED: _____

DATE/TIME PATIENT COMPLETED SURVEY: _____

ADMITTING UNIT: _____

TRANSFERRING UNIT: _____

UNIT INTUBATED: _____

DATE/TIME TRANSFERRED OR ADMITTED TO CTICU/MICU: _____

ICU SERVICE: _____

DATE PREVIOUSLY INTUBATED: _____

1) What were your most important needs to communicate while you were on the breathing machine?

2) Were you able to communicate these needs and, if so, how?

3) Which needs were able to be met?

Continued on p. 320.

Patient Survey*(Continued)*

4) Which needs were not met and why?

5) Which needs were you not able to communicate?

6) What was most beneficial or what worked best for you in communicating your needs?

7) If you could have had anything you wanted to help you communicate while you were on the breathing machine, what would it be?

8) What were your barriers in communicating?

9) What methods did your care providers use to help you communicate?

10) If you had difficulty in communicating your needs, how frustrating was the inability to effectively communicate your needs while you were on the breathing machine?

1	2	3	4	5
not frustrating	somewhat frustrating	frustrating	very frustrating	extremely frustrating

11) We've been discussing some of your experiences while you were on the breathing machine. Now, I'd like for you to just take a moment and reflect on the communication experiences that you had while you were on the breathing machine. How helpful would this communication board have been for you?

1	2	3	4	5
not helpful	somewhat helpful	helpful	most helpful	extremely helpful

12) Now, after looking at this communication board what would have worked for you and what would not have worked for you in using this for your communication needs?

13) What do you think your frustration level would have been if you were able to use this board?

1	2	3	4	5
not frustrating	somewhat frustrating	frustrating	very frustrating	extremely frustrating

ICU, Intensive care unit; CTICU, cardiothoracic ICU; MICU, medical ICU.